

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of: Huey-Jiun NGO <i>et al.</i>	Confirmation No.: 6314
Application No.: 10/758,768	Group Art Unit: 2167
Filed: January 16, 2004	Examiner: Alexandria Y Bromell
Attorney Docket No.: SKY03007	

For: METHOD AND SYSTEM FOR MOBILE TELEMTRY DEVICE
PRIORITIZED MESSAGING

Commissioner for Patents
Alexandria, VA 22313-1450

APPEAL BRIEF

Dear Sir:

This Appeal Brief is submitted in support of the Notice of Appeal dated January 15, 2010.

I. REAL PARTY IN INTEREST

The real party in interest of the present application, solely for purposes of identifying and avoiding potential conflicts of interest by board members due to working in matters in which the member has a financial interest, is Verizon Communications Inc. and its subsidiary companies, which currently include Verizon Business Global, LLC (formerly MCI, LLC) and Cellco Partnership (doing business as Verizon Wireless, and which includes as a minority partner affiliates of Vodafone Group Plc). Verizon Communications Inc. or one of its subsidiary companies is an assignee of record of the present application.

II. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals and interferences.

III. STATUS OF THE CLAIMS

Claims 1-25 are pending in this appeal. No claim is allowed. This appeal is therefore taken from the final rejection of claims 1-25 on October 15, 2009.

IV. STATUS OF AMENDMENTS

All amendments have been entered.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The claimed invention addresses problems associated with mobile telemetry devices in general and, in particular, in prioritizing information to be sent from vehicles in a fleet and asset management system to ensure timely acquisition of location information, while ensuring that urgent information is communicated from the vehicle prioritized over other information that is less urgent.

Independent claim 1 recites:

1. A method for prioritizing transmission of messages from a telemetry device (See, e.g. Specification, ¶ [11]) the method comprising:

storing a first information element in a device log in the telemetry device (See, e.g. Specification, ¶¶ [11], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, data logger 207, memory 213, queues 215, 217, 219, Fig. 3);

determining whether the first information element includes a first priority level indication (See, e.g. Specification, ¶¶ [11], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, first data structure queue 215, data logger 207, memory 213, queues 215, 217, 219, Fig. 3);

storing the first information element in a first data structure in the telemetry device when it is determined that the first information element includes the first priority level indication (See, e.g. Specification, ¶¶ [11], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, data logger 207, memory 213, queues 215, 217, 219, Fig. 3);

storing a second information element in the device log (See, e.g. Specification, ¶¶ [11], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, data logger 207, memory 213, queues 215, 217, 219, Fig. 3);

determining whether the second information element includes a second priority level indication (See, e.g. Specification, ¶¶ [11], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, data logger 207, memory 213, queues 215, 217, 219, Fig. 3);

storing the second information element in a second data structure in the telemetry device when it is determined that the second information element includes the second priority level indication (See, e.g. Specification, ¶¶ [11], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, second data structure 217, data logger 207, memory 213, queues 215, 217, 219, Fig. 3);

transmitting a first message based on the first information element from the telemetry device

for receipt by an operation unit (See, e.g. Specification, ¶¶ [11], [54], [64], [74]-[79], [90]; Fig. 2a, Fig. 2c, Fig. 3, Fig. 5); and

after transmitting the first message, transmitting a second message based on the second information element from the telemetry device for receipt by the operation unit, wherein an ordering of transmission is based on the first and second level priority indications (See, e.g. Specification, ¶¶ [11], [54], [64], [74]-[79], [90]; Fig. 2a, Fig. 2c, Fig. 3, Fig. 5).

Independent claim 8 recites:

8. A telemetry device for prioritizing transmission of messages from the telemetry device, the telemetry device comprising:

a device log including a first information element and a second information element (See, e.g.

Specification, ¶¶ [12], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig. 2a, data logger 207);

a first data structure, other than the device log, including the first information element which

includes a first priority level indication (See, e.g. Specification, ¶¶ [12], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, first data structure 215, data logger 207, memory 213, queues 215, 217, 219, Fig. 3);

a second data structure, other than the device log, including the second information element

which includes a second priority level indication (See, e.g. Specification, ¶¶ [12], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, second data structure queue 217, data logger 207, memory 213, Fig. 3); and

a processor configured to determine whether the first information element includes a first priority level indication, to determine whether the second information element includes a

second priority level indication, to transmit a first message based on the first information element from the telemetry device for receipt by an operation unit, and after transmitting the first message, to transmit a second message based on the second information element from the telemetry device for receipt by the operation unit, wherein an ordering of transmission is based on the first and second level priority indications (See, e.g. Specification, ¶¶ [12], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, processor 225, Fig. 3).

Independent claim 15 recites:

15. A computer-readable medium carrying one or more sequences of one or more instructions for prioritizing transmission of messages from a telemetry device, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

storing a first information element in a device log in the telemetry device (See, e.g. Specification, ¶¶ [13], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, data logger 207, memory 213, queues 215, 217, 219, Fig. 3);

determining whether the first information element includes a first priority level indication (See, e.g. Specification, ¶¶ [13], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, memory 213, queues 215, 217, 219, Fig. 3);

storing the first information element in a first data structure in the telemetry device when it is determined that the first information element includes the first priority level indication (See, e.g. Specification, ¶¶ [13], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1

(telemetry device 103), Fig. 2a, first data structure queue 215, data logger 207, memory 213, Fig. 3);

storing a second information element in the device log (See, e.g. Specification, ¶¶ [13], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, data logger 207, Fig. 3);

determining whether the second information element includes a second priority level indication (See, e.g. Specification, ¶¶ [13], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, data logger 207, memory 213, queues 215, 217, 219, Fig. 3);

storing the second information element in a second data structure in the telemetry device when it is determined that the second information element includes the second priority level indication (See, e.g. Specification, ¶¶ [13], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, second data structure queue 217, data logger 207, memory 213, queues 215, 217, 219, Fig. 3);

transmitting a first message based on the first information element from the telemetry device for receipt by an operation unit (See, e.g. Specification, ¶¶ [13], [54], [64], [74]-[79], [90]; Fig. 2a, Fig. 2c, Fig. 3, Fig. 5); and

after transmitting the first message, transmitting a second message based on the second information element from the telemetry device for receipt by the operation unit, wherein an ordering of transmission is based on the first and second level priority indications (See, e.g. Specification, ¶¶ [13], [54], [64], [74]-[79], [90]; Fig. 2a, Fig. 2c, Fig. 3, Fig. 5).

Independent claim 22 recites:

22. A method for prioritizing transmission of messages from a telemetry device, the method comprising:

storing a plurality of information elements in a device log in the telemetry device (See, e.g. Specification, ¶¶ [14], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, data logger 207, memory 213, queues 215, 217, 219, Fig. 3);

selectively storing each of a group of the plurality of information elements in one of a plurality of data structures in the telemetry device based on a priority indicator associated with each one of the information elements of the group (See, e.g. Specification, ¶¶ [14], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, data structures queues 215-219, data logger 207, memory 213, Fig. 3);

selecting one of the plurality of data structures based on one of the priority indicators (See, e.g. Specification, ¶¶ [14], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, data structures queues 215-219, data logger 207, Fig. 3); and

transmitting a message including one of the information elements of the selected one of the data structures from the telemetry device for receipt by an operation unit (See, e.g. Specification, ¶¶ [14], [54], [64], [74]-[79], [90]; Fig. 2a, Fig. 2c, Fig. 3, Fig. 5).

Dependent claim 23 recites:

23. A method according to claim 22, further comprising:

storing the plurality of data structures in a memory including the device log, when an external power source of the telemetry device fails (See, e.g. Specification, ¶¶ [55], [57]; Fig. 2a, internal battery 221).

Independent claim 24 recites:

24. An apparatus for prioritizing transmission of messages from a telemetry device, the apparatus comprising:

means for storing a plurality of information elements in a device log in the telemetry device

(See, e.g. Specification, ¶¶ [15], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, data logger 207, memory 213, queues 215, 217, 219, Fig. 3);

means for selectively storing a group of each of the plurality of information elements in one of a plurality of data structures in the telemetry device based on a priority indicator associated with each one of the information elements (See, e.g. Specification, ¶¶ [15], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, data structures queues 215-219, data logger 207, memory 213, Fig. 3);

means for selecting one of the plurality of data structures based on one of the priority indicators (See, e.g. Specification, ¶¶ [15], [38]-[44], [47]-[49], [53]-[56], [64]-[71]; Fig.1 (telemetry device 103), Fig. 2a, data structures queues 215-219, data logger 207, Fig. 3);
and

means for transmitting a message including one of the information elements of the selected one of the data structures from the telemetry device to an operation unit (See, e.g. Specification, ¶¶ [15], [54], [64], [74]-[79], [90]; Fig. 2a, Fig. 2c, Fig. 3, Fig. 5).

Dependent claim 25 recites:

25. An apparatus according to claim 24, further comprising:

means for storing the plurality of data structures in a memory including the device log, when an external power source of the telemetry device fails (See, e.g. Specification, ¶¶ [55], [57]; Fig. 2a, internal battery 221).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-22 and 24 were rejected for obviousness under 35 U.S.C. § 103(a) based on *Duske, Jr. et al.* (US 6,992,991) in view of *Hanson et al.* (US 2003/0120811).

Claims 23 and 25 were rejected for obviousness under 35 U.S.C. § 103(a) based on *Duske, Jr. et al.* (US 6,992,991) and *Hanson et al.* (US 2003/0120811) in view of *Klein* (US 6,178,523).

VII. ARGUMENT

A. CLAIMS 1-22 AND 24 ARE NOT RENDERED OBVIOUS BY DUSKE, JR. ET AL. AND HANSON ET AL. BECAUSE NEITHER REFERENCE DISCLOSES OR SUGGESTS THE CLAIMED STORAGE OF INFORMATION ELEMENTS IN RESPONSE TO PRIORITY LEVEL INDICATIONS AND THE REFERENCES CONSTITUTE NON-ANALOGOUS ART.

The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention under any statutory provision always rests upon the Examiner. *In re Mayne*, 104 F.3d 1339, 41 USPQ2d 1451 (Fed. Cir. 1997); *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995); *In re Bell*, 991 F.2d 781, 26 USPQ2d 1529 (Fed. Cir. 1993); *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In rejecting a claim under 35 U.S.C. § 103, the Examiner is required to provide a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 357 F.2d 385, 148 USPQ 721 (CCPA 1966); *In re Freed*, 425 F.2d 785, 165 USPQ 570 (CCPA 1970).

The Patent Office must give specific reasons why one of ordinary skill in the art would have been motivated to combine the references. See, e.g., *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000); *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998).

Independent claim 1 recites, *inter alia*, “storing the first information element in a first data structure in the telemetry device when it is determined that the first information element includes the first priority level indication” and “storing the second information element in a second data structure in the telemetry device when it is determined that the second information element includes the second priority level indication.” Independent claims 8, 15, 22, and 24 recite similar features. The Examiner acknowledged that these features are not taught by *Duske, Jr. et al.* and relied on *Hanson et al.* for a teaching of storing a first information element in a first data structure in a telemetry device when it is determined that the first information element includes a first priority level indication, and for teaching the storing of a second information element in a second data structure in the telemetry device when it is determined that the second information element includes a second priority level indication. In particular, the Examiner referred to paragraph [0089] of *Hanson et al.*, where messages are stored in corresponding queues according to priority level, and to paragraph [0175] and Fig. 9, where priorities are weighted and handled according to their weighting.

Hanson et al. is not concerned with the same type of priority and data structures, as those claimed. In *Hanson et al.*, the concern is to maintain a connection between a Mobile End System and a Mobility Management Server. If a Mobile End System becomes unreachable, suspends, or changes network address in *Hanson et al.* (e.g., due to roaming from one network interconnect to another), the Mobility Management Server maintains the connection to the associated peer task,

allowing the Mobile End System to maintain a continuous connection even though it may temporarily lose contact with its network medium. The Mobility Management Server (MMS) coupled to a mobile interconnect maintains the state of each of any number of Mobile End Systems (MES) and handles the complex session management required to maintain persistent connections to the network and to peer **application** processes. Thus, *Hanson et al.* is concerned with **maintaining connections to applications** to which the mobile devices may be connected.

The Examiner asserted, in the Final Office Action, that this argument, concerning *Hanson et al.* not being directed to the same type of priority and data structures claimed because it relates to mobile devices, is not persuasive because Appellants have not claimed more than “a telemetry device.”

Appellants do not gainsay that a mobile device may be read as a “telemetry device.” However, *Hanson et al.* relates to maintaining a connection between mobile devices in a situation where a Mobile End System may become unreachable, or network addresses change, e.g., due to roaming. In such a case, the Mobility Management Server (MMS) maintains a continuous connection by maintaining the state of Mobile End Systems. Thus, *Hanson et al.* is concerned with **maintaining connections to applications** to which the mobile devices may be connected, whereas the instant claimed subject matter is directed to the “transmission of **messages**.” *Hanson et al.* is not directed to the “transmission of **messages**,” *per se* (other than indirectly maintaining a connection so that messages may reach their intended destination), or to the determination of whether first and second **information elements** include a first and second priority level indication, respectively.

The “priority” disclosed at paragraphs [0089] and [0175] of *Hanson et al.* relates to “association priority” or “application priority within an association,” but not to the priority of first

and second information elements, as claimed. In paragraph [0089] of *Hanson et al.*, priority is configured for a user and the machine that a user is logged in on. At paragraph [0175], priority queues are assigned a weight factor, which is a configuration parameter that is returned by the configuration manager 228 when a Mobile End System 104 to Mobility Management Server 102 is created. Thus, contrary to the Examiner's assertion, the priority levels in *Hanson et al.* are not related to first and second information elements, wherein a first information element is stored in a first data structure in a telemetry device when it is determined that the first information element includes a first priority level indication, and a second information element is stored in a second data structure in the telemetry device when it is determined that the second information element includes a second priority level indication.

In the Final Office Action, the Examiner responded to Appellants' argument that *Hanson et al.* is not directed to the "transmission of **messages**," by citing paragraph [0030] of the reference. That paragraph does recite that a "protocol generates transactions into messages" and that "RPC messages contain the entire network transaction initiated by an application running on the Mobile End System."

However, these "messages" of *Hanson et al.* are not transmitted based on the priority levels of first and second information elements, wherein the first information element includes a first priority level indication and the second information element includes a second priority level indication, as claimed. Rather, the messages of *Hanson et al.* are generated by a Remote Procedure Call (RPC) protocol. They are not generated responsive to, or based on, the first and second information elements (which include first and second priority level indications) from the telemetry device. Thus, the "messages" disclosed by *Hanson et al.* have no semblance to the claimed "transmission of messages."

The Examiner asserted, in the Final Office Action, that *Hanson et al.* “teaches that the RPC protocol engine handles requests to determine where they should be stored and processed **after messages are initially stored in the global queue**” (emphasis added) citing paragraphs [0122], [0123], and [0132]. Thus, the Examiner appears to acknowledge that any determination of how requests are to be handled occurs **after** messages are initially stored in the queues. If the messages are already stored in the queue (data storage structure) when determinations are made as to how to further process them, *Hanson et al.* does not teach storing information elements in separate data structures **after** a determination is made as to whether the information elements include priority level indications, as claimed.

Neither of the applied references discloses the storage of two separate information elements in two separate data structures. The Examiner agreed, in the Final Office Action, that *Duske, Jr. et al.* does not disclose two such data storage structure, and asserted that this is taught by *Hanson et al.* at paragraph [0089], where messages are stored in corresponding queues, and in paragraph [0175], where priorities are weighted and handled according to their weighting.

However, a review of paragraph [0089] reveals that it teaches nothing about queues. While paragraph [0175] does refer to “dispatch queues” being processed beginning with the highest priority queue, this is not a teaching of “storing a first information element in a device log in the telemetry device; determining whether the first information element includes a first priority level indication; storing the first information element in a first data structure in the telemetry device when it is determined that the first information element includes the first priority level indication; storing a second information element in the device log; determining whether the second information element includes a second priority level indication; storing the second information element in a second data structure in the telemetry device when it is determined that

the second information element includes the second priority level indication.” That is, the instant claimed subject matter does not merely store two pieces of data having different priorities in two separate data structures. There must also be a determination of whether each of two information elements includes a priority level **indication** and only when such a determination is positive are those information elements stored in first and second data structures.

At best, the queues in *Hanson et al.* are prioritized by using a weighting factor, thus assigning different priority levels to queues. However, there is no disclosure or suggestion in *Hanson et al.* that any information stored within first and second queues were **first** stored there based on that information including a “priority level indication.”

Regarding Appellants’ argument concerning a lack of teaching of the claimed priorities by *Hanson et al.*, the Examiner cited paragraphs [0089] and [0175] of the reference in the Final Office Action, contending that because “priority is based upon associations, order, sequence, importance, or with respect to another object or event, there is some confusion with respect to the priority of the first and second information elements as claimed. If the priority of the first and second information elements is not with respect to each other or another element, it is unclear how Applicants determine priority.”

Appellants’ definition of “priority” is no different than that which would be commonly understood by artisans, i.e., that one thing takes precedence over another thing. But, it is not only that the priority of one information element is greater than another information element. Rather, taking independent claim 1 as exemplary, there is a determination of “whether the first information element includes a first priority level **indication**” (in which case the first information element is stored in a first data structure) and there is a determination of “whether the second information element includes a second priority level **indication**” (in which case the second

information element is stored in a second data structure). Then, there is a transmission of first and second messages based on the first and second information elements, “wherein an ordering of transmission is based on the first and second level priority indications.” Thus, it is not a general priority relationship between information elements that is important. Rather, it is priority level **indications** that determine whether the first and second information elements are stored in the data structures. **If** the data structures store the first and second information elements, responsive to whether or not there are such priority level **indications**, then, and only then, will there be a transmission of messages based on these information elements, with the order of transmission of the messages based on the first and second level priority **indications**.”

Hanson et al. neither discloses nor suggests such priority level **indications**. The reliance, in *Hanson et al.*, of “association priority,” or “application priority within an association” does not teach or suggest the claimed priority level **indications** within information elements, as claimed. In paragraph [0089] of *Hanson et al.*, priority is configured for a user and the machine on which a user is logged in. At paragraph [0175], priority queues are assigned a weight factor, which is a configuration parameter that is returned by the configuration manager 228 when a Mobile End System 104 to Mobility Management Server 102 is created. Thus, the priority levels in *Hanson et al.* are not related to first and second information elements, wherein a first information element is stored in a first data structure in a telemetry device when it is determined that the first information element includes a first priority level **indication**, and a second information element is stored in a second data structure in the telemetry device when it is determined that the second information element includes a second priority level **indication**.

Accordingly, since neither of the applied references discloses the claimed feature of storing a first information element in a first data structure in a telemetry device when it is

determined that the first information element includes a first priority level indication, and for teaching the storing of a second information element in a second data structure in the telemetry device when it is determined that the second information element includes a second priority level indication, no *prima facie* case of obviousness has been established, within the meaning of 35 U.S.C. § 103(a).

(i) *HANSON ET AL.* AND *DUSKE, JR. ET AL.* CONSTITUTE NON-ANALOGOUS ART

Moreover, even if *Hanson et al.* could be considered to disclose storing a first information element in a first data structure in a telemetry device when it is determined that the first information element includes a first priority level indication, and storing a second information element in a second data structure in the telemetry device when it is determined that the second information element includes a second priority level indication, which it cannot, the skilled artisan would not have sought to combine *Hanson et al.* with *Duske, Jr. et al.*

Contrary to the Examiner's assertion that *Hanson et al.* and *Duske, Jr. et al.* "are analogous art because they are from the same field of endeavor of providing a user with mobile communication" (e.g., Office Action of March 18, 2009, page 6), these references are concerned with two, entirely separate problems. Whereas *Duske, Jr. et al.* is concerned with transmitting messages between mobile terminals and a central control center, wherein message display forms having predetermined display formats act as templates for generating user messages, *Hanson et al.* is directed to maintaining a connection between a Mobile End System and a Mobility Management Server, such that if a Mobile End System becomes unreachable, suspends, or changes network address (e.g., due to roaming from one network interconnect to another), the Mobility Management Server maintains the connection to the associated peer task, allowing the

Mobile End System to maintain a continuous connection even though it may temporarily lose contact with its network medium.

Considering the disparate natures of these two references, while they may both be involved in mobile terminal communications, in general, the references do not constitute analogous art. The test for analogous art outside an inventor's field of endeavor is whether the art pertains to the particular problem confronting the inventor. *In re Clay*, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992). The inventor's field of endeavor here is the prioritization of transmission of messages from a telemetry device. Clearly, the disclosure of *Hanson et al.* is outside this field of endeavor, so the question is whether *Hanson et al.* pertains to the particular problem facing the inventor. That particular problem concerns prioritizing information to be sent from vehicles in a fleet and asset management system to ensure timely acquisition of location information, while ensuring that urgent information is communicated from the vehicle prioritized over other information that is less urgent. It is evident that *Hanson et al.* is not concerned with this problem of ensuring timely acquisition of **location information**, while ensuring access to urgent information. Therefore, since *Hanson et al.* does not pertain to the particular problem confronting the inventor and is outside the inventor's field of endeavor, *Hanson et al.* does not constitute analogous art and is not combinable with *Duske, Jr. et al.*, within the meaning of 35 U.S.C. § 103(a).

(ii) NO MOTIVATION FOR THE COMBINATION OF HANSON ET AL. AND DUSKE, JR. ET AL.

Responsive to Appellants' argument that the combination of *Duske, Jr. et al.* and *Hanson et al.* is improper, the Examiner asserted in the Final Office Action that since *Hanson et al.* "teaches a system for data communication using a mobility management server to store states and

complex session management, para. [0018]” and “Duske teaches an advanced messaging system for initiated mobile terminals that operate without providing excessive loading on a satellite, column 2, lines 30-34,” it would have been obvious to **modify *Hanson et al.* with *Duske, Jr. et al.*** “in order to efficiently manage data message transmissions (column 2, lines 41-67). Duske tracks messages and message logs (figure 8-5), where the messages have a status (or priority) and are sent to a queue (figure 8-11).”

First, the statement of the rejection relied on *Duske, Jr. et al.* in view of *Hanson et al.* The Examiner’s rationale in the Final Office Action is an attempt to reverse the combination by modifying *Hanson et al.* with *Duske, Jr. et al.*, rather than the other way around. In any event, the modification alleged by the Examiner would result, at best, only in some advanced messaging system for initiating the mobile terminals in *Hanson et al.* However, the Examiner never explained why such an “advanced messaging system” would be needed in *Hanson et al.* since the system of *Hanson et al.* already possesses an “advanced messaging system” in using a mobility management server to store states and complex session management. No advantage, not already included in the *Hanson et al.* system, would have been seen by those skilled in the art in modifying *Hanson et al.* to include “an advanced messaging system for initiated mobile terminals that operate without providing excessive loading on a satellite.” Further, the “message transmissions,” alleged to be taught by *Hanson et al.*, would not be more efficiently managed by anything taught by *Duske, Jr. et al.* because the RPC messages of *Hanson et al.* contain the entire network transaction initiated by an application running on an Mobile End System (paragraph [0030]) while the messages in *Duske, Jr. et al.* are not transaction data to be used in maintaining a connection, as in *Hanson et al.*, but are actual messages transported between two mobile terminals. They are two different types of “messages.” The skilled artisan would not have been

led to modify any message processing of one system by any teaching of the other system since they are so unrelated. In fact, for the reasons, *supra*, *Duske, Jr. et al.* and *Hanson et al.* are directed to non-analogous arts and not combinable within the meaning of 35 U.S.C. § 103(a).

Furthermore, even if *Hanson et al.* could be combined with *Duske, Jr. et al.*, which it cannot, the instant claimed subject matter would not result.

In *Duske, Jr. et al.*, “message proforma” is a template that defines the contents of a message to be transmitted over a network, as well as the processing required for, or by, the message. The “priority,” at which messages using this message proforma should be sent, is an attribute of the proforma object. The cited portion of col. 28 relates to message logs:

The software requirements in this section relate to the Message Log object. A message log in this context is an object that contains a list of message objects. The software will maintain five message logs:
Incoming Message Log (IML)
Outgoing Message Log (OML)
Network Message Log (NML)
Saved Message Log (SML).
Data Message Log (DML).

As is clear from these portions of *Duske, Jr. et al.*, message logs are maintained and templates defining the contents of a message have, as one attribute, a predetermined priority at which messages using that template should be sent. *Duske, Jr. et al.* fails to disclose the storage of two separate information elements in two separate data structures and, more importantly, storing these elements in response to a specified condition, as acknowledged by the Examiner. *Duske, Jr. et al.* specifies no such condition of first and second information elements including, respectively, a “first priority level indication” and a “second priority level indication” prior to storing these information elements. The template, or message proforma, in *Duske, Jr. et al.* requires a message in this format to have a priority at which a message is sent, but the **determination that a message, or information element, includes this priority is not a**

precondition for storing the message, or information element, in a first or second data structure, as required by the instant claims.

Hanson et al., also, does not disclose that a determination that a message, or information element, includes a priority level indication is a precondition for storing the message, or information element, in a first or second data structure. Thus, the combination of *Duske, Jr. et al.* and *Hanson et al.* does not result in the **determination that a message, or information element, includes a priority level indication is a precondition for storing the message**, or information element, in a first or second data structure.

Moreover, even assuming all the Examiner alleges about the references to be accurate, and, for the reasons *supra*, Appellants do not agree that this is the case, the combination of *Duske, Jr. et al.* and *Hanson et al.* would result, at best, only in a plurality of queues having varying priorities based on assigned configuration parameters regarding associations between a Mobile End System and a Mobile Management Server, with such queues having no connection, or relevance, to the message logs maintained and templates defining the contents of a message of *Duske, Jr. et al.* The priority queues of *Hanson et al.* have no connection with predetermined priorities at which messages using a template should be sent, as disclosed in *Duske, Jr. et al.*

The forced modification of *Duske, Jr. et al.* by adding a plurality of priority queues in an attempt to construct a plurality of data structures, wherein a first information element including a first priority level indication is stored in a first data structure and a second information element including a second priority level indication is stored in a second data structure could only be suggested by a resort to impermissible hindsight, using Appellants' claims as a blueprint. This is not permissible within the meaning of 35 U.S.C. § 103(a).

Accordingly, the Honorable Board is respectfully requested to reverse the rejection of claims 1-22 and 24 under 35 U.S.C. § 103(a) in view of the Examiner's clear error in failing to establish the requisite case of *prima facie* obviousness.

B. CLAIMS 23 AND 25 ARE NOT RENDERED OBVIOUS BY *DUSKE, JR. ET AL.* AND *HANSON ET AL.* IN VIEW OF *KLEIN* BECAUSE *KLEIN* DOES NOT CURE THE DEFICIENCIES OF THE OTHER TWO REFERENCES.

With regard to the rejection of claims 23 and 25, since *Klein*, offered for the alleged teaching of how power is supplied to a telemetry device when an external power source fails, does not cure the deficiencies of *Duske, Jr. et al.* and *Hanson et al.*, explained above, the subject matter of claims 23 and 25 is not obvious under 35 U.S.C. § 103(a).

Moreover, claims 23 and 25 are separately patentable from their independent claims because there would have been no reason to combine *Klein* with *Duske, Jr. et al.* and *Hanson et al.* The Examiner asserted that *Hanson et al.* “teaches a system for data communication using a mobility management server to store states and complex session management, para. [0018]” and “Duske teaches an advanced messaging system for initiated mobile terminals that operate without providing excessive loading on a satellite, column 2, lines 30-34,” adding that “Klein teaches that as a check routine is executed upon main power disconnection, the current operating state of the program need not be checked during restoration.” The Examiner's rationale for combining the three references, as set forth at page 7 of the Final Office Action, is “in order to save information in the device if external power fails.”

Appellants do not dispute the conventionality of generally storing data in a backup, non-volatile storage facility in case of power loss. However, for the reasons *supra*, *Duske, Jr. et al.* and *Hanson et al.* are directed to non-analogous arts and are simply not combinable, while *Klein*,

directed to power failure recovery in a battery-operated portable device, also constitutes non-analogous art. In addition to failing to cure the deficiencies of the other two references, *Klein* is merely concerned with a battery-operated portable device, which, upon power failure, provides a technique that allows return to an exact point in a program when the power is restored. As such, *Klein* would have no applicability, recognized by artisans, that would lead the person of ordinary skill to modify the queues of *Hanson et al.*, in a modified *Duske, Jr. et al.* system, such that the queues (identified by the Examiner in the Final Office Action as the claimed data structures) would be stored in a memory including a device log, when an external power source of the telemetry device fails. That is, where the claimed telemetry device is a mobile terminal, as in *Duske, Jr. et al.* or *Hanson et al.*, in accordance with the claim language, when the power in one of the mobile terminals fails (e.g., a battery is removed or depleted of charge), a plurality of data structures must be stored in a memory including a device log. Since the Examiner identifies the queues of *Hanson et al.* as the claimed “data structures,” these queues must be stored upon a power failure. However, the queues of *Hanson et al.* are not even located within the mobile terminal devices, as they are located within the Mobility Management Server (MMS). Therefore, it is without any technical merit to assert that the queues with the MMS are to be stored in a memory including a device log, when an external power source of one of the mobile terminals (Mobile End System) fails. A power failure in one of the Mobile End Systems of *Hanson et al.* would have no effect on the queues within the MMS and there would have been no reason to modify the references in order to provide for such a response by the MMS in the event of a power failure of one of the Mobile End Systems.

Accordingly, the Honorable Board is respectfully requested to reverse the rejection of claims 23 and 25 under 35 U.S.C. § 103(a) in view of the Examiner's clear error in failing to establish the requisite case of *prima facie* obviousness.

VIII. CONCLUSION AND PRAYER FOR RELIEF

For the foregoing reasons, Appellants request the Honorable Board to reverse each of the Examiner's rejections.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 504213 and please credit any excess fees to such deposit account.

Respectfully Submitted,

DITTHAVONG MORI & STEINER, P.C.

March 15, 2010
Date

/Phouphanomketh Ditthavong/
Phouphanomketh Ditthavong
Attorney for Applicant(s)
Reg. No. 44658

Errol A. Krass
Attorney for Applicant(s)
Reg. No. 60090

918 Prince Street
Alexandria, VA 22314
Tel. (703) 519-9952
Fax (703) 519-9958

IX. CLAIMS APPENDIX

1. A method for prioritizing transmission of messages from a telemetry device, the method comprising:

storing a first information element in a device log in the telemetry device;

determining whether the first information element includes a first priority level indication;

storing the first information element in a first data structure in the telemetry device when it is

determined that the first information element includes the first priority level indication;

storing a second information element in the device log;

determining whether the second information element includes a second priority level indication;

storing the second information element in a second data structure in the telemetry device

when it is determined that the second information element includes the second priority level indication;

transmitting a first message based on the first information element from the telemetry device for receipt by an operation unit; and

after transmitting the first message, transmitting a second message based on the second information element from the telemetry device for receipt by the operation unit, wherein an ordering of transmission is based on the first and second level priority indications.

2. A method according to claim 1, wherein the first data structure includes a first queue, the second data structure includes a second queue, and the device log includes a third queue.

3. A method according to claim 1, wherein the first data structure is associated with the first priority level indication and the second data structure is associated with a second priority level indication.

4. A method according to claim 1, further comprising:

determining whether a third information element absent from the device log includes a third priority level indication;

storing the third information element in a third data structure when it is determined that the third information element includes the third priority level indication; and

after transmitting the second message, transmitting a third message based on the third information element, wherein the ordering of transmission is further based on the first, second, and third level priority indications.

5. A method according to claim 1, further comprising:

storing a fourth information element in the device log;

determining whether the fourth information element includes the first priority level indication;

determining whether the first data structure includes storage available for storing the fourth information element when it is determined that the fourth information element includes the first priority level indication; and

discarding the fourth information element from consideration of storage in the first data structure when the step of determining whether the first data structure includes storage available determines that storage for storing the fourth information element is unavailable in the first data structure.

6. A method according to claim 1, wherein the first data structure and the second data structure are stored in a dynamic memory included in the telemetry device, and the device log is stored in a flash memory included in the telemetry device.

7. A method according to claim 1, further comprising:

receiving a request for data of the telemetry device; and

transmitting a data message based on content of the device log in response to the request.

8. A telemetry device for prioritizing transmission of messages from the telemetry device, the telemetry device comprising:

a device log including a first information element and a second information element;

a first data structure, other than the device log, including the first information element which includes a first priority level indication;

a second data structure, other than the device log, including the second information element which includes a second priority level indication; and

a processor configured to determine whether the first information element includes a first priority level indication, to determine whether the second information element includes a second priority level indication, to transmit a first message based on the first information element from the telemetry device for receipt by an operation unit, and after transmitting the first message, to transmit a second message based on the second information element from the telemetry device for receipt by the operation unit, wherein an ordering of transmission is based on the first and second level priority indications.

9. A telemetry device according to claim 8, wherein the first data structure includes a first queue, the second data structure includes a second queue, and the device log includes a third queue.

10. A telemetry device according to claim 8, wherein the first data structure is associated with the first priority level indication and the second data structure is associated with a second priority level indication.

11. A telemetry device according to claim 8, wherein

the processor is further configured to determine whether a third information element absent from the device log includes a third priority level indication, to store the third information element in a third data structure when it is determined that the third information element includes the third priority level indication; and after transmitting the second message, to transmit a third message based on the third information element, wherein the ordering of transmission is further based on the first, second, and third level priority indications.

12. A telemetry device according to claim 8, wherein the device log includes a fourth information element, and

the processor is further configured to determine whether the fourth information element includes the first priority level indication to determine whether the first data structure includes storage available for storing the fourth information element when it is determined that the fourth information element includes the first priority level indication, and to discard the fourth information element from consideration of storage in the first data structure when the determination of whether the first data structure includes storage

available determines that storage for storing the fourth information element is unavailable in the first data structure.

13. A telemetry device according to claim 8, further comprising:

a dynamic memory including the first data structure and the second data structure; and
a flash memory including the device log.

14. A telemetry device according to claim 8, wherein the processor is further configured to receive a request for data of the telemetry device, and to transmit a data message based on content of the device log.

15. A computer-readable medium carrying one or more sequences of one or more instructions for prioritizing transmission of messages from a telemetry device, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

storing a first information element in a device log in the telemetry device;
determining whether the first information element includes a first priority level indication;
storing the first information element in a first data structure in the telemetry device when it is determined that the first information element includes the first priority level indication;
storing a second information element in the device log;
determining whether the second information element includes a second priority level indication;
storing the second information element in a second data structure in the telemetry device when it is determined that the second information element includes the second priority level indication;

transmitting a first message based on the first information element from the telemetry device
for receipt by an operation unit; and
after transmitting the first message, transmitting a second message based on the second
information element from the telemetry device for receipt by the operation unit, wherein
an ordering of transmission is based on the first and second level priority indications.

16. A computer-readable medium according to claim 15, wherein the first data structure includes a first queue, the second data structure includes a second queue, and the device log includes a third queue.

17. A computer-readable medium according to claim 15, wherein the first data structure is associated with the first priority level indication and the second data structure is associated with a second priority level indication.

18. A computer-readable medium according to claim 15, further including instructions for causing the one or more processors to perform the steps of:
determining whether a third information element absent from the device log includes a third
priority level indication;
storing the third information element in a third data structure when it is determined that the
third information element includes the third priority level indication; and
after transmitting the second message, transmitting a third message based on the third
information element, wherein the ordering of transmission is further based on the first,
second, and third level priority indications.

19. A computer-readable medium according to claim 15, further including instructions for causing the one or more processors to perform the steps of:

storing a fourth information element in the device log;

determining whether the fourth information element includes the first priority level indication;

determining whether the first data structure includes storage available for storing the fourth information element when it is determined that the fourth information element includes the first priority level indication; and

discarding the fourth information element from consideration of storage in the first data structure when the step of determining whether the first data structure includes storage available determines that storage for storing the fourth information element is unavailable in the first data structure.

20. A computer-readable medium according to claim 15, wherein the first data structure and the second data structure are stored in a dynamic memory included in the telemetry device, and the device log is stored in a flash memory included in the telemetry device.

21. A computer-readable medium according to claim 15, further including instructions for causing the one or more processors to perform the steps of:

receiving a request for data of the telemetry device; and

transmitting a data message based on content of the device log in response to the request.

22. A method for prioritizing transmission of messages from a telemetry device, the method comprising:

storing a plurality of information elements in a device log in the telemetry device;

selectively storing each of a group of the plurality of information elements in one of a plurality of data structures in the telemetry device based on a priority indicator associated with each one of the information elements of the group;

selecting one of the plurality of data structures based on one of the priority indicators; and

transmitting a message including one of the information elements of the selected one of the data structures from the telemetry device for receipt by an operation unit.

23. A method according to claim 22, further comprising:

storing the plurality of data structures in a memory including the device log, when an external power source of the telemetry device fails.

24. An apparatus for prioritizing transmission of messages from a telemetry device, the apparatus comprising:

means for storing a plurality of information elements in a device log in the telemetry device;

means for selectively storing a group of each of the plurality of information elements in one of a plurality of data structures in the telemetry device based on a priority indicator associated with each one of the information elements;

means for selecting one of the plurality of data structures based on one of the priority indicators; and

means for transmitting a message including one of the information elements of the selected one of the data structures from the telemetry device to an operation unit.

25. An apparatus according to claim 24, further comprising:

means for storing the plurality of data structures in a memory including the device log, when
an external power source of the telemetry device fails.

X. EVIDENCE APPENDIX

Appellants are unaware of any evidence that is required to be submitted in the present Evidence Appendix.

XI. RELATED PROCEEDINGS APPENDIX

Appellants are unaware of any related proceedings that are required to be submitted in the present Related Proceedings Appendix.